



MBR1060C

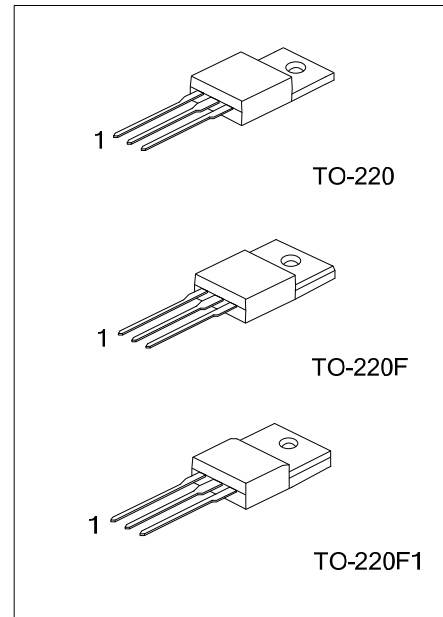
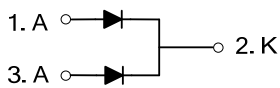
DIODE

SCHOTTKY BARRIER RECTIFIER DIODES

FEATURES

- * Schottky Barrier Chip
- * Guard Ring Die Construction for Transient Protection
- * Low Power Loss, High Efficiency
- * High Surge Capability
- * High Current Capability and Low Forward Voltage Drop
- * For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications

SYMBOL



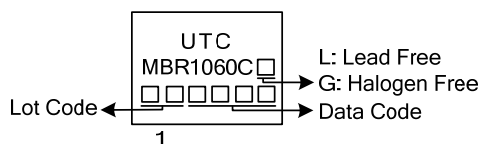
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
MBR1060CL-TA3-T	MBR1060CG-TA3-T	TO-220	A	K	A	Tube
MBR1060CL-TF3-T	MBR1060CG-TF3-T	TO-220F	A	K	A	Tube
MBR1060CL-TF1-T	MBR1060CG-TF1-T	TO-220F1	A	K	A	Tube

Note: Pin Assignment: A: Anode K: Cathode

<p>MBR1060CL-TA3-T</p> <p>(1)Packing Type</p> <p>(2)Package Type</p> <p>(3)Lead Plating</p>	<p>(1) T: Tube</p> <p>(2) TA3: TO-220, TF3: TO-220F, TF1: TO-220F1</p> <p>(3) L: Lead Free, G: Halogen Free</p>
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MARKING



■ ABSOLUTE MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$, unless otherwise specified)

PARAMETER		SYMBOL	RATINGS	UNIT
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	60	V
Maximum DC Blocking Voltage		V_R	60	V
Working Peak Reverse Voltage		V_{RWM}	60	V
Maximum PMS Reverse Voltage		$V_{R(RMS)}$	42	V
Average Forward Rectified Output Current ($T_C=105^{\circ}\text{C}$)	Per Leg	I_O	5	A
	Total		10	
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half-Sine-Wave		I_{FSM}	125	A
Typical Junction Capacitance (Note 4)		C_J	150	pF
Operating Temperature		T_J	-55 ~ +150	$^{\circ}\text{C}$
Storage Temperature		T_{STG}	-55 ~ +150	$^{\circ}\text{C}$

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.

Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ THERMAL DATA

PARAMETER		SYMBOL	RATINGS	UNIT
Junction to Ambient		θ_{JA}	60	$^{\circ}\text{C}/\text{W}$
Junction to Case	TO-220	θ_{JC}	2	$^{\circ}\text{C}/\text{W}$
	TO-220F/TO-220F1		4	$^{\circ}\text{C}/\text{W}$

■ ELECTRICAL CHARACTERISTICS

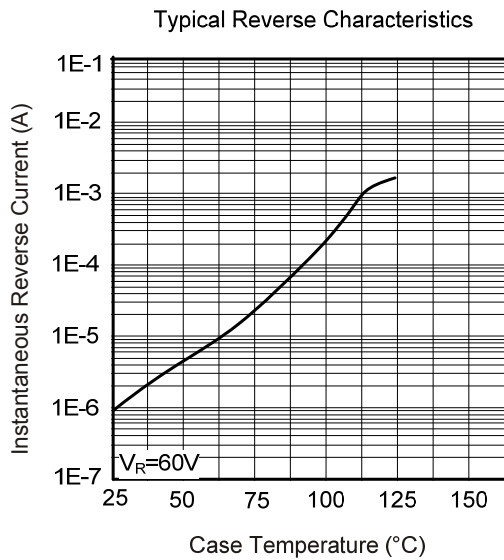
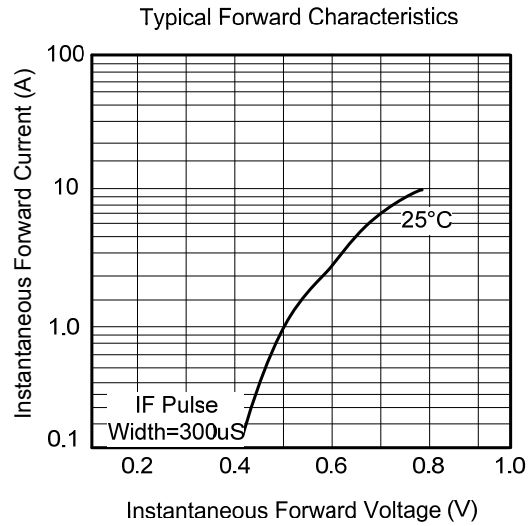
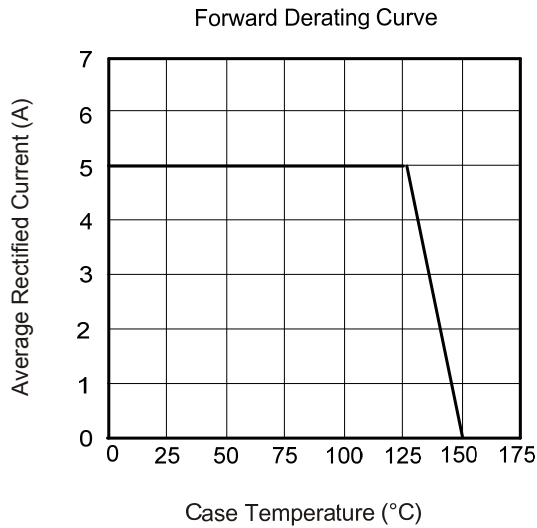
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage Drop (Note 2)	V_F	$I_F=5\text{A}, T_C=25^{\circ}\text{C}$			0.80	V
		$I_F=5\text{A}, T_C=125^{\circ}\text{C}$			0.70	V
		$I_F=10\text{A}, T_C=25^{\circ}\text{C}$			0.95	V
		$I_F=10\text{A}, T_C=125^{\circ}\text{C}$			0.90	V
Instantaneous Reverse Current (Note 2)	I_R	Rated DC Voltage, $T_C=25^{\circ}\text{C}$			100	μA
		Rated DC Voltage, $T_C=125^{\circ}\text{C}$			15	mA

Notes: 1. 2.0 μs Pulse Width, $f = 1.0\text{ KHz}$.

2. Pulse Test: Pulse Width = 300 μs , Duty Cycle $\leq 2.0\%$.

3. Applied $V_R = 4.0\text{V}$ and $f = 1.0\text{MHz}$.

■ TYPICAL CHARACTERISTICS



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